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Listing of the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-104 – Cancelled without prejudice

105. (Currently Amended) A device according to claim 103-182, wherein the central axis of the liner is an axis substantially perpendicular to the center axis of the internal concave surface of the liner.

106. (Currently Amended) A device according to claim 103-182, wherein the central axis of the liner is an axis defined by the external surface of the liner.

107. (Currently Amended) A device according to claim 102-182, wherein the variable angle chamfer varies according to angles measured at a plurality of radial locations around the rim relative to a reference line defined by structure the central axis of the liner.

108. (Currently Amended) A device according to claim 107-182, wherein the plurality of variable angles define impingement angles of a femoral component that includes a head adapted to be received in the internal concave surface of the liner and wherein the impingement angles are disposed to permit an increased range of motion at a corresponding radial location on the rim.

109. (Currently Amended) A device according to claim 108-182, wherein the plurality of variable angles are determined using a group of impingement angles corresponding to a plurality of femoral components in an impingement condition with the liner whose heads are adapted to be received in the internal concave surface of the liner.

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110. (Currently Amended) A device according to claim 108 182, wherein the shape of the variable angle chamfer surface varies according to the cross-sectional shape of a portion of a femoral component that is in an impingement condition with the liner.

Claims 111-115 – Cancelled without prejudice

116. (Currently Amended) A device according to claim 102 182, wherein the variable angle chamfer is symmetric about a plane.

117. (Currently Amended) A device according to claim 102 182, wherein the a distance across the opening of the internal concave surface of the liner is from about 22mm to about 36mm.

118. (Currently Amended) A device according to claim 102 182, wherein the external surface of the liner is adapted to be received in an acetabular shell with an external diameter of about 40mm to about 80mm.

119. (Currently Amended) A device according to claim 102 182, wherein the liner further includes a locking surface for securing the liner in the acetabular shell.

120. (Original) A device according to claim 119, wherein the locking surface comprises a serrated edge.

121. (Currently Amended) A device according to claim 102 182, further including a shoulder on the liner.

122. (Currently Amended) A device according to claim 102 182, wherein the shell has a center and the center central axis of the liner internal concave surface is offset from the center of the shell.

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123. (Original) A device according to claim 122, wherein the center of the liner internal concave surface is shifted laterally by up to about 10 mm.

124. (Original) A device according to claim 122, wherein the center of the liner internal concave surface is shifted laterally by about 4 mm.

125. (Original) A device according to claim 122, wherein the center of the liner internal concave surface is shifted medially by up to about 8 mm.

126. (Currently Amended) A device according to claim 102 182, wherein the opening of the liner internal concave surface is anteverted.

127. (Currently Amended) A device according to claim 126, wherein the shell has a center and the center central axis of the liner internal concave surface is anteverted up to about 45 degrees relative to the central axis of the shell.

128. (Currently Amended) A device according to claim 126, wherein the shell has a center and the center central axis of the liner internal concave surface is anteverted about 20 degrees relative to the central axis of the shell.

129. (Currently Amended) A device according to claim 102 182, where the shell has a center and the center central axis of the liner internal concave surface is oriented up to about 45 degrees relative to the central axis of the shell.

130. (Currently Amended) A device according to claim 102 182, where the shell has a center and the center central axis of the liner internal concave surface is oriented about 20 degrees relative to the central axis of the shell.

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Claims 131-134 – Cancelled without prejudice

135. (Currently Amended) A device according to claim 102 182, further comprising a surface located between the liner internal concave surface and the rim surface, which serves to reduce dislocation of a femoral component received within the liner.

Claims 136 – 137 – Cancelled without prejudice

138. (Currently Amended) A device according to claim 102 182, wherein the liner internal concave surface is an internal diameter.

139. (Currently Amended) A device according to claim 102 182, wherein the liner internal concave surface is generally hemispherical.

Claims 140 – 142 - Cancelled without prejudice

143. (Currently Amended) A device according to claim 102 182, further comprising a femoral component comprising a head, neck and stem, wherein the head is adapted to articulate within the internal concave surface of the liner.

Claims 144 – 181 - Cancelled without prejudice

182. (New) A prosthetic device comprising:

(a) an acetabular shell comprising an internal concave surface adapted to receive a liner and an external surface adapted to be received in an acetabulum; and

(b) an acetabular liner having:

an internal concave surface adapted to receive the head of a femoral component, the concave surface having a periphery with an opening defined by an internal diameter and having a central axis;

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an external surface positioned on an opposing side of the liner from the internal concave surface and adapted to be received in the internal concave surface of the acetabular shell; and

a rim located between the internal concave surface and the external surface of the liner, at least a portion of the rim comprising a variable angle chamfer surface comprising a plurality of variable angles, each variable angle defined as the angle at any point on or near the periphery of the liner internal diameter at which the surface of the chamfer is positioned relative to the center axis of the opening of the internal diameter of the liner.